

Seedlings grown from fresh seed are much more resistant than those from older seed. By different experimentation they confirm the findings of other observers as to the power of calcium salts (they speak of sulfate) to offset the toxic action of magnesium and sodium salts.—C. R. B.

Edwin James.—Students of taxonomy will be interested in a recent paper by PAMMEL,⁴⁷ which gives an account of Dr. JAMES, whose name is so intimately associated with the early explorations of the Rocky Mountain region. Not only numerous plants, but also a mountain peak bears his name, though the latter is now better known as Pike's Peak. Through papers found in the Parry herbarium, local biographical sketches, and information obtained directly from relatives, a very satisfactory account has been prepared, and the personality of JAMES is thus rescued for botanists.—J. M. C.

Conifers of China.—The late MAXWELL T. MASTERS left a paper on the distribution of conifers in China, which has just been published.⁴⁸ The total number of species known from China at the time of writing (June 20, 1907), inclusive of Formosa, was 87, distributed among 23 genera. In one table China and Japan are compared; the former containing 87 species, of which 42 are peculiar; the latter 48 species, of which 15 are peculiar. A large table shows the distribution of all the native species of China in the various regions of the empire as well as in neighboring countries.—J. M. C.

Nuclear division in Basidiobolus.—OLIVE⁴⁹ has studied nuclear and cell division both in the beaks and in the vegetative cells of Basidiobolus. The spindle is broad, cylindrical, barrel-shaped, and intranuclear. At the equatorial plate stage it shows three darkly staining regions, the chromatin plate at the center and two pole plates at the ends. The wall is formed as a ring, which begins at the periphery of the cell and closes in like an iris diaphragm, as in many algae, a mode of growth quite different from that described by FAIRCHILD in 1897.—CHARLES J. CHAMBERLAIN.

Variation and infectious chlorosis.—Those who are interested in these problems will find useful an extensive paper by LINDEMUTH,⁵⁰ which embodies a precise and comprehensive exposition of the results of his studies on variation, which go back as far as 1870, and have been continued with more or less vigor to

⁴⁷ PAMMEL, L. H., Dr. Edwin James. *Annals of Iowa* 8:161-185, 277-295. 1908. Also distributed as a separate.

⁴⁸ MASTERS, MAXWELL T., On the distribution of the species of conifers in the several districts of China, and on the occurrence of the same species in neighboring countries. *Jour. Linn. Soc. Bot.* 38:198-205. 1908.

⁴⁹ OLIVE, E. W., Cell and nuclear division in Basidiobolus. *Annales Mycol.* 5:404-418. *pl. 10.* 1907.

⁵⁰ LINDEMUTH, H., Studien über die sogenannte Panaschüre und über einige begleitende Erscheinungen. *Landw. Jahrb.* 36:807-862. *pls. 8, 9. figs. 16.* 1907.